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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,412	06/30/2003	Takanori Iwamatsu	FUJI 20.477	2200

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EXAMINER

PATHAK, SUDHANSHU C

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/611,412

Applicant(s)

IWAMATSU ET AL.

Examiner

Sudhanshu C. Pathak

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on June 30th, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on June 30th, 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-12 are pending in the application.

Claim Objections

2. Claim 12 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 9. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 3-4 & 11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In regards to Claims 3-4 & 11, the claim discloses receiving a spread signal (Claim 11, lines 2-3); despreading the received signal; equalizing the despread signal; and spreading the amplitude and the error information; wherein the spread amplitude and error information are used as controlling signals in the equalizing. Therefore, the equalized signal and the amplitude and error information have

different modes, and therefore it is impossible to perform accurate equalization as is also stated in the specification (Page 5, lines 21-25).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2, 5-9, 12 (apparatus) & 10 (method) are rejected under 35 U.S.C. 102(b) as being anticipated by Ross (5,692,006).

In regards to Claims 1-2, 9-10 & 12, Ross discloses a CDMA receiving device (Abstract, lines 1-3 & Column 1, lines 5-10, 45-67 & Column 2, lines 64-67 & Fig. 1) {Interpretation: The reference discloses a spread spectrum receiver} comprising: receiving a spread signal (Fig. 1, element "R(N)" & Abstract, lines 1-3 & Column 2, lines 64-67 & Column 4, lines 25-30) {Interpretation: The reference discloses a spread spectrum receiver receiving a spread signal, furthermore receiving the spread signal is also inherent in a spread spectrum (CDMA) receiver}; an equalizing (interference compensation / signal processing) unit for equalizing (performing interference compensation / signal processing) the received signal (Fig. 1, element 101 & Column 3, lines 30-40 & Column 4, lines 25-62 & Claim 1); a despreading unit for despreading the received signal (Fig. 1, elements 120, 122, 132 & Column 4, lines 13-16, 63-67 & Column 5, lines 1-7 & Claim 1); and a controlling signal adjusting unit for adjusting a signal obtained from the despread signal to a spread

type controlling signal to be supplied to the equalizing unit (Fig. 1, elements 128, "symbol error", 132, 134 & Column 3, lines 49-55 & Column 4, lines 13-17, 63-67 & Column 5, lines 50-58 & Claim 1) {Interpretation: The reference discloses the error signal which is then re-spread (spreading unit) (and processed) and fed back to the equalizer so as to adjust the weights of the equalizer}.

In regards to Claims 5-8, Ross discloses a CDMA receiving device (Abstract, lines 1-3 & Column 1, lines 5-10, 45-67 & Column 2, lines 64-67 & Fig. 1) {Interpretation: The reference discloses a spread spectrum receiver} comprising: a receiving unit for receiving a spread signal (Fig. 1, element "R(N)" & Abstract, lines 1-3 & Column 2, lines 64-67 & Column 4, lines 25-30) {Interpretation: The reference discloses a spread spectrum receiver receiving a spread signal, furthermore receiving the spread signal is also inherent in a spread spectrum (CDMA) receiver}; an equalizing (interference compensation) unit for equalizing (performing interference compensation of) the received signal (Fig. 1, element 101 & Column 3, lines 30-40 & Column 4, lines 25-62 & Claim 1); a despreading unit for despreading the equalized signal; and a spreading unit for spreading amplitude information and error information of the despread signal; wherein the spread amplitude information and error information are used as controlling signals in the equalizing unit (Fig. 1, elements 128, "symbol error", "gain", 132, 134 & Column 3, lines 49-55 & Column 4, lines 13-17, 63-67 & Column 5, lines 50-58 & Claim 1) {Interpretation: The reference discloses the error signal which is then re-spread (spreading unit) (and processed) and fed back to the equalizer so as to adjust the weights of the equalizer}.

Conclusion

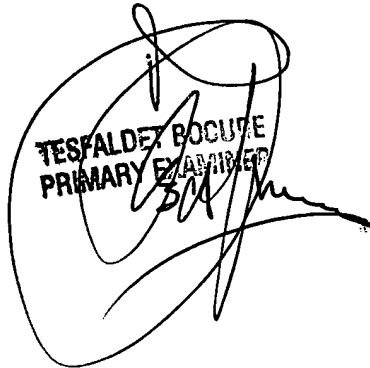
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure, it is recommended to the applicant to amend all the claims so as to be patentable over the cited prior art of record. A detailed list of pertinent references is included with this Office Action (See Attached "Notice of References Cited" (PTO-892)).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sudhanshu C. Pathak whose telephone number is (571)-272-3038. The examiner can normally be reached on M-F: 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571)-272-3042.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A circular stamp with the text "TESFALDEY BOCUTE" and "PRIMARY EXAMINER" is overlaid with a handwritten signature. The signature is written in a cursive style and appears to be "Sudhanshu C. Pathak".

Sudhanshu C. Pathak
Examiner
Art Unit 2611